

Amendments to the Claims:

This listing of claims will replace all prior version, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended) A method for determining a recording power of a radiation beam for recording information onto a recording medium by an optical drive operated at a user-desired recording speed, said method comprising the steps of:

- (a) determining an optimum recording power corresponding to each of a plurality test speeds being operated, respectively;
- (b) generating a function of speed based on a relationship between the optimum recording power and the corresponding test speed; [[and]]
- (c) calculating said recording power of the used-desired recording speed by applying said user-desired recording speed in said function of speed; and
- (d) recording the information onto the recording medium by substantially maintaining and applying said recording power when the optical drive is operated at said user-desired recording speed.

Claim 2 (currently amended) The method of claim 1, between step (b) and step (c), further comprising the step of:

- (b1) judging whether the user-desired speed is equal to any of the plurality of test speeds;
- (b2) if the user-desired speed is not equal to any of the plurality of test

speeds then performing step(c); and

(b3) otherwise setting the recording power of the user-desired ~~[[spped]]~~
speed as the optimum recording power of a corresponding test speed equal
to the user-desired speed and not performing (c) .

Claim 3 (previously presented) The method of claim 2, wherein the user-
desired speed is faster than all of the plurality of test speeds.

Claim 4 (canceled).

Claim 5 (previously presented) The method of claim 1, wherein step (a)
comprising:

(a1) recording information onto the recording medium while varying a
predetermined recording power;

(a2) receiving a radiation beam reflected from the recording medium
during step (a1);

(a3) analyzing the reflected radiation beam to estimate effect of
recording information under operation of the test speed being operated; and

(a4) changing the predetermined recording power and repeating steps
(a1) through (a3) until the optimum recording power of the corresponding
test speed is determined.

Claim 6 (original) The method of claim 5, wherein said function of speed is a
polynomial function of at least two orders.

Claim 7 (original) The method of claim 5, wherein said function of speed is an
exponential function.

Claim 8 (previously presented) The method of claim 5, wherein said function of speed is generated by a curve-fitting program.

Claim 9 (currently amended) An information recording/reproducing apparatus capable of determining a recording power of a radiation beam for recording information onto a recording medium by an optical drive operated at a user-desired speed, said apparatus comprising:

a recording processing device comprising a radiation generating circuit for recording information onto the recording medium;

a retrieving processing device comprising a radiation detector for receiving the radiation beam reflected from the recording medium during recording information;

a controller, connected to said recording processing device and said retrieving processing device, for determining an optimum recording power corresponding to each of a plurality of test speeds being operated by analyzing the reflected radiation beam to estimate effect of recording information, the controller further fitting the corresponding optimum recording powers versus the plurality of test speeds to generate a function of speed; and

a determining device, connected to said controller, for calculating the recording power of the user-defined speed by applying the user-desired speed in the function of speed;

wherein said apparatus records the information onto the recording medium by substantially maintaining and applying said recording power when the optical drive is operated at said user-desired speed.

Claim 10 (previously presented) The information recording/reproducing apparatus of claim 9, wherein the user-desired speed is faster than all of the plurality of test speeds.

Claim 11 (previously presented) The information recording/reproducing apparatus of claim 9, wherein the determining device also judges whether said user-desired speed is equal to any of the plurality of test speeds, and if the user-desired speed is equal to a corresponding test speed then the controller sets the recording power of the user-desired speed as the optimum recording power of the corresponding test speed and skips applying the user-desired speed in the function of speed.

Claim 12 (original) The information recording/reproducing apparatus of claim 11, wherein said function of speed is a polynomial function of at least two orders.

Claim 13 (original) The information recording/reproducing apparatus of claim 11, wherein said function of speed is an exponential function.

Claim 14 (previously presented) The information recording/reproducing apparatus of claim 11, wherein said function of speed is generated by a curve-fitting program.